

AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows:

Claims 1-5. (Canceled)

6. (Currently Amended) A isolated nucleic acid encoding the protein having an amino acid sequence which is selected from a group consisting of SEQ ID NO: 3 and a variant thereof , wherein said protein has the activity of transferring N-acetylglactosamine to N-acetylglucosamine via a β 1-4 linkage, wherein the variant has the amino acid sequence of SEQ ID NO:3 with 1 to 10 amino acids substituted or deleted, or 1 to 10 amino acids inserted or added of Claim 4.

7. (Currently Amended) A nucleic acid ~~encoding the protein of Claim [1]~~6, which hybridizes with a nucleic acid having the nucleotide sequence shown in SEQ ID NO: [[2 or]] 4 under high stringency ~~[[stringent]]~~ conditions.

Claim 8. (Canceled)

9. (Currently Amended) The nucleic acid of Claim 7 having a nucleotide sequence represented by ~~nucleotides 1-3120 of the nucleic acid sequence shown in SEQ ID NO: 2 or nucleotides 1-2997 of the nucleic acid sequence shown in~~ of SEQ ID NO: 4.

Claim 10. (Canceled)

11. (Previously Presented) A recombinant vector containing the nucleic acid of Claim 6 and being capable of expressing said nucleic acid in a host cell.

12. (Currently Amended) An isolated host cell transformed with the recombinant vector of Claim 11.

13. (Currently Amended) An analytical nucleic acid, which hybridizes to the nucleic acid of Claim 6 under high ~~[[stringent]]stringency~~ conditions wherein the nucleic acid contains 18 bases to 26 bases.

14. (Currently Amended) A primer comprising the ~~[[The]]~~ analytical nucleic acid of Claim 13, ~~which is used as a primer and is~~ selected from a group consisting of SEQ ID NOs: 20, 21, 23 and 24.

Claim 15. (Canceled)

16. (Currently Amended) An isolated cancer marker comprising ~~[[The]]the~~ analytical nucleic acid of Claim 13, ~~which is used as a cancer marker~~.

17. (Previously Presented) An assay kit comprising the analytical nucleic acid of Claim 14 and assay instructions.

Claims 18-21. (Canceled)

22. (Withdrawn) A method for determining a canceration of a biological sample comprising the steps of: (a) quantifying the nucleic acid of Claim 6 in the biological sample; and (b) estimating that the biological sample is cancerous in a case that the quantity value of the nucleic acid in the biological sample is 1.5 times or more than that in a control biological sample.

23. (Withdrawn) The method of Claim 22, comprising the steps of: (a) hybridizing at least one analytical nucleic acids to the nucleic acid in the biological sample; (b) amplifying the nucleic acid; (c) hybridizing the analytical nucleic acid to the amplification product; (d) quantifying a signal rising from said amplification product and said analytical nucleic acid hybridized; and (e) estimating that the biological sample is

cancerous in the case that the quantity value of said signal is 1.5 times or more than that of a corresponding signal of a control biological sample.

24. (new) An isolated nucleic acid sequence which encodes a protein which is 95% or more identical to SEQ ID NO:3.

25. (new) An isolated nucleic acid sequence which encodes a protein which is 90% or more identical to SEQ ID NO:3.

26. (new) An isolated nucleic acid which completely hybridizes to the nucleic acid sequence of claim 24 under high stringency conditions.